



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/027,580	12/21/2001	Sunil K. Gupta	29250-000550	1242	
30594 HARNESS. DI	7590 05/16/2007 CKEY & PIERCE, P.L.C.		EXAMINER VO, HUYEN X		
P.O. BOX 891	0				
RESTON, VA 20195			ART UNIT	PAPER NUMBER	
	•		2626		
			. MAIL DATE	DELIVERY MODE	
			05/16/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No. 10/027,580		Applicant(s) GUPTA, SUNIL K.				
						Examiner	4	Art Unit
				Huyen X. Vo		2626		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. of period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COM 36(a). In no event, howev will apply and will expire SI cause the application to I	MMUNICATION. er, may a reply be timel (X (6) MONTHS from the	y filed e mailing date of this com				
Status								
1)🛛	Responsive to communication(s) filed on 20 Fe	ebruary 2007.						
		action is non-final	l.					
· · · · · · · · · · · · · · · · · · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
4)⊠	Claim(s) 8-11,13 and 14 is/are pending in the a	application						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
	Claim(s) is/are allowed.							
	Claim(s) 8-11,13 and 14 is/are rejected.							
	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/or	r election requirem	ent.					
Applicati	on Papers							
9)[7	The specification is objected to by the Examine	r	•					
			or b)□ objected	d to by the Examir	ner			
10)⊠ The drawing(s) filed on <u>21 December 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correcti		•	, ,	R 1.121(d).			
11)	The oath or declaration is objected to by the Ex							
Priority ι	ınder 35 U.S.C. § 119		•					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)[a) ☐ All b) ☐ Some * c) ☐ None of:							
	1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
		,						
Attachmen		_						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		iterview Summary (P aper No(s)/Mail Date					
3) 🔲 Infor	nation Disclosure Statement(s) (PTO/SB/08)	_	otice of Informal Pate					
Pape	r No(s)/Mail Date	6) 🗌 O	ther:					

Application/Control Number: 10/027,580

Art Unit: 2626

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/20/2007 have been fully considered but they are not persuasive. Although Everhart's invention is directed toward in-vehicle speech recognition application and Hedin's invention is directed toward a client/server speech recognition system, they are from the same field of endeavor, namely speech recognition system. The two references are not teaching away from each other. Hedin is relied upon for the teaching of client-server architecture while Everhart is relied upon for the teaching of speech recognition adaptation. If one combines the teaching of speech recognition adaptation (and leave the in-vehicle applications alone) with the client-server system of Hedin, one would obtain the claimed invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to readily realize that by combining the teaching of Hedin with Everhart would produce the claimed invention.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 2

- 3. Claims 8-11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart et al. (US 6587824) in view of Hedin et al. (US 6185535).
- 4. Regarding claim 8, Everhart et al. disclose a speech recognition system, comprising:

a client device receiving an utterance from a user (element 76 in figure 6);

the client device comparing said received utterance to a stored recognition vocabulary representing a currently active vocabulary (*element 78 in figure 6*), recognizing the received utterance and dynamically modifying the stored recognition vocabulary to improve recognition accuracy for subsequent received utterance, wherein the client device enables the user to create a replacement command word that is stored in the stored recognition vocabulary as a replacement command word corresponding to the received utterance, where the user's utterance was not recognized by the client device (*col. 7, line 28 to col. 8, line 26, particularly col. 8, lines 17-24*).

Everhart et al. fail to specifically disclose a server in communication with the client device. However, Hedin et al. teach a server in communication with the client device (*referring to figures 1a-b and 3*).

Since Everhart et al. and Hedin et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Everhart et al. by incorporating the teaching of Hedin et al. in order to improve speech recognition efficiency by providing a more

powerful speech recognizer at the server to recognize words/commands that speech recognizer of the client device is not capable of recognizing.

- 5. Regarding claims 9-10, Everhart et al. further disclose the step of dynamically modifying of the stored recognition vocabulary is dependent on a current state of user interaction in a voiced dialog of the user that includes the utterance and on a recognition result from the comparison (col. 5, lines 10-44, appropriate voice command set is retrieved for recognition), and an application configured to dynamically modify the stored recognition vocabulary (col. 7, line 28 to col. 8, line 26).
- 6. Regarding claim 11, Everhart et al. fail to specifically disclose the system of claim 8, the server further including a vocabulary builder application configured to dynamically modify the stored recognition vocabulary by sending data to client application.

 However, Hedin et al. teach the server further including a vocabulary builder application configured to dynamically modify the stored recognition vocabulary by sending data to client application (*col. 11*, *lines 41-46*).

Since Everhart et al. and Hedin et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Everhart et al. by incorporating the teaching of Hedin et al. in order to improve speech recognition accuracy of subsequent recognition of the same word.

- 7. Regarding claim 14, Everhart et al. further disclose the system of claim 8, the client device further including a processor for comparing a speech template representing the received utterance to said stored recognition vocabulary to obtain a recognition result, wherein the processor controls the client application to modify the stored recognition vocabulary (element 78 in figure 6).
- 8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everhart et al. (US 6587824) in view of Hedin et al. (US 6185535), as applied to claim 8, and further in view of Kenevsky et al. (US 6161090).
- 9. Regarding claim 13, the modified Everhart et al. fail to specifically disclose that the server further including a database storing client-specific data that is updatable by the client device. However, Kenevsky et al. further teach that the server further including a database storing client-specific data that is updatable by the client device (col. 7, line 8 to col. 8, line 36, user's model).

Since the modified Everhart et al. and Kenevsky et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Everhart et al. by incorporating the teaching of Kenevsky et al. in order to provide a security level with an arbitrary level of security with speech and speaker recognition technology and natural language understanding. This global architecture has the advantage of being universal and adaptable to substantially any situation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen X. Vo whose telephone number is 571-272-7631. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/027,580

Art Unit: 2626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HXV

5/3/2007

PATRICK N. EDOUARD SUPERVISORY PATENT EXAMINER Page 7